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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/699,844	08/20/1996	DAVID R. DETTMER	18799.79(TT1	3703

7590 09/02/2003

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EXAMINER
SWERDLOW, DANIEL

ART UNIT	PAPER NUMBER
2644	30

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	08/699,844	DETTMER, DAVID R.	
	Examiner	Art Unit	
	Daniel Swerdlow	2644	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☒ Applicant's reply has overcome the following rejection(s): see attached.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: _____.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *see attached*

DETAILED ACTION

Response to Amendment

1. The amendments in applicant's response filed on 14 August 2003, paper no. 29, to the final Office action mailed on 23 June 2003, paper no. 28, consist solely of cancellation of claims. As such, the amendments are entered.

Response to Arguments

2. Applicant's arguments, see paper no. 29, filed 14 August 2003, with respect to rejection of Claims 1, 2, 4, 7 through 9 and 24 through 37 under 35 USC § 112 (2) have been fully considered and are persuasive. The rejection of Claims 1, 2, 4, 7 through 9 and 24 through 37 under 35 USC § 112 (2) has been withdrawn. Prior art rejections of these claims are maintained.

3. Applicant's arguments, see paper no. 29, filed 14 August 2003, with respect to rejection of Claims 24 and 35 under 35 USC § 103 (a) as being unpatentable over McCaslin in view of Teitler have been fully considered and are persuasive. The rejection of Claims 24 and 35 under 35 USC § 103 (a) as being unpatentable over McCaslin in view of Teitler has been withdrawn. The rejection of Claims 24 and 35 under 35 USC § 103 (a) as being unpatentable over Barron in view of Teitler are maintained.

4. Applicant's arguments regarding prior art rejections of Claims 1, 2, 4, 7 through 9 and 24 through 35 filed 14 August 2003 have been fully considered but they are not persuasive.

5. Applicant alleges that Barron et al. (US Patent 5,357,567) fails to teach "a microprocessor alternately receiving speech signals in the respective [i.e., transmit and receive] speech paths". Examiner respectfully disagrees. Barron discloses setting gains of variable gain blocks (i.e., adjusting gain levels) in the speech paths (column 5, lines 5-7) in response to peak signal levels (column 4, lines 65-66 and column 5, lines 3-4) by determining peak received speech followed by determining peak transmitted speech in an iterative process (i.e., alternately) (Fig. 8, reference 810, 825; column 8, lines 24-39). Further, Barron discloses gain adjustment to achieve continuously variable output signal levels (column 1, lines 51-56). As shown in Fig. 8, Barron teaches a process where measurement of peak transmitted speech magnitude follows measurement of peak received speech magnitude in order to provide inputs (X_R and X_T) to the gain adjusting process (Fig. 9). Because this process is repeated constantly as the speakerphone operates, it is clear that transmit and receive signal are alternately received and processed to produce the respective peak speech levels in order to continuously update the gain adjustments. Therefore, Barron teaches alternately receiving speech signals as claimed.

6. Applicant alleges that Barron fails to teach full duplex operation as contemplated by the claimed invention. Examiner respectfully disagrees. The incremental nature of the attenuation adjustment in the transmit and receive lines taught by Barron necessarily and inherently passes through a mode of operation in which the attenuation on both channels is at a level that allows both the near-end and far-end talkers to talk and hear simultaneously. This meets the claim limitations "duplex" and "full-duplex and is similar in operation to the system disclosed by applicant. Generally stated, applicant discloses entry into the "full-duplex" state from the

transmit state when the near-end signal exceeds a noise threshold and the far-end signal exceeds the near-end signal (Fig. 6, steps 142, 144). The "full-duplex" state is entered from the receive state when the far-end signal exceeds a noise threshold and the near-end signal exceeds the far-end signal by a margin (i.e., BothThresh) (Fig. 5, steps 114, 116). The "full-duplex" state is maintained only as long as the far-end signal exceeds its noise threshold (Fig. 7, step 172). Absent these conditions, the speakerphone reverts to the conventional transmit, receive and idle states used in switched attenuation half-duplex speakerphones. Therefore, the recitation in the claims "duplex ... speakerphone" is interpreted to mean, "having a mode of operation, existing under certain conditions, in which simultaneous two-way transmission in both directions can occur". That Barron characterizes this type of operation as "emulating half duplex operation over full-duplex communication channels" does not alter the fact that the reference as a whole meets the elements of the claimed invention.

7. In response to applicant's argument regarding the combination of McCaslin (US Patent 5,668,794) and Barron, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, McCaslin is silent on physical elements to implement the echo suppressor. As such, one skilled in the art would be motivated to seek a physical platform on which to implement the teachings of

McCaslin. The elements disclosed by Barron (i.e., microprocessor and storage of an algorithm in a memory) would be recognized by one skilled in the art as being suitable for this purpose.

8. Applicant alleges that the absence of the "Appendix A" referenced in Barron from the copy of the patent provided with the prior Office action renders all rejections based on this reference improper. Examiner respectfully disagrees. Examiner is guided by MPEP 707.05(a), which states "[T]he examiner should: ... (C) Include in the application file wrapper all of the references cited by the examiner which are to be furnished to the applicant and which have been obtained from the classified search file". The copy of US Patent 5,357,567 (Barron) that was provided to the applicant was the entirety of that maintained in the classified search file. As such, the provided reference is sufficient and the rejections based thereupon are proper.

MINSUN OH HARVEY
PRIMARY EXAMINER

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